## **CLAIMS**

- 1. A radial sealing ring assembly (8) adapted for use in a pressurised system which comprises a radial sealing ring provided with at least a pair of primary sealing lips (9 and 10) radially disposed on a first, circumferential, face (13) of the ring; a second, axial end, face (14) of the radial sealing ring being provided with means for dispersing pressurised fluid characterised in that the means for dispersing the pressurised fluid is a labyrinth seal (15 or 16) located on the axial end face (14).
- 10 2. A radial sealing ring assembly (8) according to claim 1 characterised in that the means for dispersing the pressurised fluid comprises means for dispersing pressure in a circumferential direction.
- 3. A radial sealing ring assembly (8) according to claim 2 characterised in that
  the means for dispersing the pressurised fluid comprises means for dispersing
  pressure in a circumferential direction and a radial direction.
  - 4. A radial sealing ring assembly (8) according to claim 1 characterised in that the first circumferential face of the radial sealing ring is the inner face and the second circumferential face is the outer face.
  - 5. A radial sealing ring assembly (8) according to claim 1 characterised in that the radial sealing ring is adapted to be used in a system wherein the external pressure on the radial sealing ring is greater than the internal pressure.
  - 6. A radial sealing ring assembly (8) according to claim 5 characterised in that the primary sealing lips (9 and 10) are radially disposed from an outer circumferential face of the radial sealing ring, whilst means for dispersing pressurised fluid is provided on the axial end face of the radial sealing ring.

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- 7. A radial sealing ring assembly (8) according to claim 1 characterised in that both axial end faces of the radial sealing ring are provided with a pressurised fluid dispersing means (15 and 16).
- 5 8. A radial sealing ring assembly (8) according to claim 6 characterised in that the labyrinth seal (15 and 16) comprises a plurality of apertures.
  - 9. A radial sealing ring assembly (8) according to claim 6 characterised in that the labyrinth seal (15 and 16) comprises a plurality of holes.

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- 10. A radial sealing ring assembly (8) according to claims 8 or 9 characterised in that the apertures or holes are arranged in a regular pattern.
- 11. A radial sealing ring assembly (8) according to claim 10 characterised in that the regular pattern is a 'brick-bond' pattern.
  - 12. A radial sealing ring assembly (8) according to claim 1 characterised in that the means for dispersing the pressurised fluid is an integral part of the axial end face of the radial sealing ring.

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- 13. A radial sealing ring assembly (8) according to claim 11 characterised in that the apertures or holes are in a regular pattern of two or three circumferential rows.
- 14. A radial sealing ring assembly (8) according to claim 13 characterised in that
  25 the apertures or holes are in a regular pattern of two circumferential rows.
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- 15. A radial sealing ring assembly (8) according to claims 8 or 9 characterised in that the apertures or holes are from 0.5 to 2.0mm deep.
- 30 16. A radial sealing ring assembly (8) according to claims 8 or 9 characterised in that the apertures of holes are preferably substantially the same size and shape.

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- 17. A radial sealing ring assembly (8) according to claim 1 characterised in that the assembly is adapted to tolerate from 20 to 70 bar under conventional operating conditions.
- 5 18 A radial sealing ring assembly (8) according to claim 1 characterised in that the radial seal is provided with a containment ring (18).
  - 19. A radial sealing ring assembly (8) according to claim 1 characterised in that the containment ring (18) is on the second or outer circumferential face of the radial sealing ring.
    - A radial sealing ring assembly (8) according to claim 1 characterised in that the containment ring (18) is on the first or inner circumferential face of the radial sealing ring.
  - 21. A radial sealing ring assembly (8) according to claim 20 characterised in that the containment ring (18) comprises a support ring (23) around the second or outer circumferential face of the radial sealing ring.
- 20 22. A radial sealing ring assembly (8) according to claim 1 characterised in that the support ring (23) is preferentially a coiled spring.
- 23. A radial sealing ring assembly (8) according to claim 1 characterised in that the seal is provided with a containment ring (18) around the second or outer circumferential face of the radial sealing ring.
  - 24. A radial sealing assembly (8) which comprises a pair of primary sealing lips (9 and 10), one of the pair radially disposed on a first or inner circumferential face, the second radially disposed on a second or outer circumferential face, of the radial sealing assembly, the primary and secondary lips (14 and 15; and 35 and 36) being connected by a containment ring.

- A method of introducing a three way joint into a pipeline which comprises a 25. hole in a pipe and attaching a second pipe over the hole wherein the radial sealing ring (8) according to any one of the preceding claims lies between the two pipes.
- A method according to claim 25 characterised in that the method comprises 26. using a plurality of radial sealing rings (8) according to claim 1.
- A method according to claim 26 characterised in that the method comprises 27. using an outermost radial sealing ring which is provided with outer facing sealing 10 lips and an innermost radial sealing ring which is provided with inner facing sealing lips.
- A method according to claim 19 characterised in that the innermost and 28. 15 outermost radial scaling rings are separate.
  - (8) substantially as described with reference to the 29. accompanying

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